CLAIMS

1. A method for processing concentrates, particularly concentrates produced from copper sulfide-based ores, **characterized** in that the concentrate (4) to be processed, obtained from ore concentration, is divided into two sulfidic concentrates of different types, to a concentrate (7) mainly containing poorly soluble components such as the precious metals contained in the ore, and to a concentrate (8) mainly containing well soluble components, and that the concentrate (8) containing soluble components is conducted to a leaching step (9), and the solution (13) obtained from said leaching step is conducted to at least one conversion step (11,16), and that in the conversion step (11) located first in the flowing direction, there is fed the concentrate (7) containing poorly soluble components, and that in the conversion step (11) that is located first in the flowing direction, at least the copper contained in the solution is converted to sulfidic form by means of the sulfide-form iron of the concentrate (7) containing poorly soluble components, and that at least part of the solution (12) obtained from the conversion step (11,16) is returned to the leaching step (9).

2. A method according to claim 1, **characterized** in that in the conversion steps (16) following the conversion step that is located first in the flowing direction, the different metal components are converted to sulfidic form by means of sulfide-form iron (17) fed into said conversion step.

3. A method according to claim 1 or 2, **characterized** in that the leaching (9) is carried out as atmospheric leaching at the temperature of 50 – 105° C.

4. A method according to claim 1 or 2, **characterized** in that the leaching (9) is carried out as autoclave leaching.

5. A method according to any of the preceding claims, **characterized** in that the conversion step (11,16) is carried out at the temperature of 90 – 200° C.

6. A method according to claim 5, **characterized** in that the conversion step (11,16) is carried out at the temperature of 150 – 190° C.

7. A method according to any of the preceding claims, **characterized** in that the iron added in the first conversion step (11) in the flowing direction is chalcopyrite ($CuFeS_2$).

8. A method according to any of the preceding claims, **characterized** in that the iron added in the conversion step (16) that is next in succession after the first conversion step is troilite (FeS).

9. A method according to any of the preceding claims 1 - 6, **characterized** in that the iron added in the conversion step (16) that is next in succession after the first conversion step is pyrrhotite ($Fe_{1-x}S$).

10. A method according to any of the preceding claims, **characterized** in that the flotation process (19) used for producing the concentrates is controlled by means of mineral-specific electrochemical measurements.

11. A method according to any of the preceding claims, **characterized** in that the leaching step (9) used in the treatment of the concentrate is controlled by means of mineral-specific electrochemical measurements.

12. A method according to any of the preceding claims, **characterized** in that the conversion step (11,16) used in the treatment of the concentrate is controlled by means of mineral-specific electrochemical measurements.

13. A method according to any of the preceding claims, **characterized** in that in the conversion step (11) that is located first in the flowing direction, the precious metals contained in the concentrates are recovered.